

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

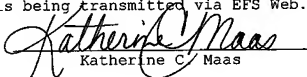
Applicant(s) : Armando Jesus Argumedo et al.  
Serial No. : 10/643,619  
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Group Art Unit : 2627  
Examiner : William J. Klimowicz  
USPTO Customer No. : 49220  
Attorney Docket No. : TUC920030077US1  
For "Cartridge with Slanted Memory Chip and Conforming Wall"

RESPONSE UNDER 37 C.F.R. §1.111

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CERTIFICATE OF TRANSMITTAL

I hereby certify that on this <sup>25<sup>th</sup></sup> day of July, 2006, this correspondence is being transmitted via EFS Web.

  
Katherine C. Maas

TO THE COMMISSIONER FOR PATENTS  
RESPONSE TO OFFICE ACTION AND AMENDMENT

Dear Sir:

In response to the Office Action dated April 25, 2006, Applicant(s) respectfully request the Examiner to reconsider and further examine the Application in view of the amendments and/or comments as set forth below.

Amendments to the Specification: None.

Amendments to the Claims: Begin on page 2.

Amendments to the Drawings: None.

Remarks: Begin on page 8.

**Amendment to the Claims:**

1. (Currently amended) A magnetic-tape cartridge,  
comprising:

a cartridge case having orthogonal walls in parallelepiped configuration and a slanted wall between two of the orthogonal walls, the slanted wall recessed with respect to one of the orthogonal walls; and

a memory device connected to an antenna capable of communication through a magnetic field propagated from the slanted wall along a plurality of transmission axes.

2. (Original) The cartridge of Claim 1, wherein said antenna is positioned at about 45 degrees with respect to said two of the orthogonal walls of the case.

3. (Original) The cartridge of Claim 1, wherein said slanted wall connects a rear wall and a bottom wall of the case.

4. (Original) The cartridge of Claim 2, wherein said slanted wall connects a rear wall and a bottom wall of the case.

5. (Original) The cartridge of Claim 1, wherein said antenna is adjacent to an interior surface of the slanted wall.

6. (Original) The cartridge of Claim 4, wherein said antenna is adjacent to an interior surface of the slanted wall.

7. (Original) The cartridge of Claim 1, wherein said antenna is adjacent to an exterior surface of the slanted wall.

8. (Original) The cartridge of Claim 6, wherein said antenna is adjacent to an exterior surface of the slanted wall.

9. (Original) The cartridge of Claim 1, wherein said slanted wall connects a rear wall and a side wall of the case.

10. (Original) The cartridge of Claim 2, wherein said slanted wall connects a rear wall and a side wall of the case.

11. (Currently amended) A system for communicating with a memory chip in a magnetic-tape cartridge, comprising:

a case for said cartridge having orthogonal walls in parallelepiped configuration and a slanted wall between two of the orthogonal walls;

a chip antenna connected to said memory device chip and alternatively disposed on an exterior surface of the slanted wall or integrated into the slanted wall, the chip antenna—and capable of communication through a magnetic field propagated from the slanted wall; and

a reading antenna connected to an external reading device in magnetic-field communication with the chip antenna.

12. (Original) The system of Claim 11, wherein said reading antenna in operation is positioned within a space demarcated by a corner defined by an intersection between planes extending from said two of the orthogonal walls.

13. (Original) The system of Claim 11, wherein said chip antenna is positioned at about 45 degrees with respect to said two of the orthogonal walls of the case.

14. (Original) The system of Claim 11, wherein said slanted wall is placed between a rear wall and a bottom wall of the case.

15. (Original) The system of Claim 11, wherein said chip antenna is adjacent to an interior surface of the slanted wall.

16. (Original) The system of Claim 11, wherein said chip antenna is adjacent to an exterior surface of the slanted wall.

17. (Original) The system of Claim 16, further including a protective coating over the chip antenna.

18. (Currently amended) A method for transmitting data between a memory device in a magnetic-tape cartridge and an external reading device, comprising the steps of:

providing a cartridge case having orthogonal walls in parallelepiped configuration and a slanted wall between two of said orthogonal walls, the slanted wall recessed with respect to one of said orthogonal walls;

connecting the memory device to a chip antenna capable of communication through a magnetic field propagated from the slanted wall;

providing a reading antenna connected to an external reading device in magnetic-field communication with the chip antenna; and

transmitting data between said chip and reading antennas through said magnetic field propagated from the slanted wall.

19. (Original) The method of Claim 18, wherein said reading antenna is positioned within a space demarcated by a corner defined by an intersection between planes extending from said two of the orthogonal walls.

20. (Original) The method of Claim 18, wherein said chip antenna is positioned at about 45 degrees with respect to said two of the orthogonal walls.

21. (Original) The method of Claim 18, wherein said slanted wall is placed between a rear wall and a bottom wall of the case.

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22. (Original) The method of Claim 18, wherein said chip antenna is adjacent to an interior surface of the slanted wall.

23. (Original) The method of Claim 18, wherein said chip antenna is adjacent to an exterior surface of the slanted wall

**REMARKS**

The Office Action objects to claim 11 because of a specified informality. Applicants have amended claim 11 to correct the informality per the Examiner's helpful suggestion.

The Office Action rejects claims 1-23 under 35 U.S.C. 103(a) as being unpatentable over Iino (US 6,817,563) in view of McAllister et. al. (US 6,304,416).

Applicants have amended claims 1, 11, and 18 to more clearly distinguish over the prior art references. Claim 1, as amended, recites a magnetic-tape cartridge. A cartridge case has orthogonal walls in parallelepiped configuration and a slanted wall between two of the orthogonal walls. The slanted wall is recessed with respect to one of the orthogonal walls. A memory device is connected to an antenna capable of communication through a magnetic field propagated from the slanted wall along a plurality of transmission axes.

Applicants believe that neither Iino nor McAllister, taken singularly or in combination, teach or suggest a magnetic-tape cartridge with a case having a slanted wall which is recessed with respect to the orthogonal walls as claimed. Iino teaches a slanted wall 22 which is not recessed. McAllister does not teach a slanted wall.

Since neither reference fails to teach or suggest a recessed slanted wall, claim 1 as amended is believed to patentably distinguish over the prior art references, taken singularly or in combination.

Claims 2-10 are believed to be in condition for allowance as each is dependent from an allowable base claim.



Claim 11, as amended, is drawn to a system for communicating with a memory chip in a magnetic-tape cartridge. A case for the cartridge has orthogonal walls in parallelepiped configuration and a slanted wall between two of the orthogonal walls. A chip antenna is connected to said memory chip and alternatively disposed on an exterior surface of the slanted wall, or integrated into the slanted wall. The chip antenna is capable of communication through a magnetic field propagated from the slanted wall. A reading antenna is connected to an external reading device in magnetic field communication with the chip antenna.

Again, Applicants believe that neither Iino, nor McAllister teaches or suggests a chip antenna connected to a memory chip, and alternatively disposed on an exterior surface of the slanted wall, or integrated into the slanted wall as presently claimed. Iino does not teach a chip antenna. McAllister teaches an antenna provided within a tape cartridge for electromagnetic coupling, but does not teach the placement of the antenna either on an external surface of a slanted wall of the cartridge or incorporated into the slanted wall.

Since neither reference fails to teach or suggest alternatively an antenna disposed on an exterior surface of the slanted wall or incorporated into the slanted wall, claim 11 as amended is believed to patentably distinguish over the prior art references, taken singularly or in combination. Claims 12-17 are believed to be in condition for allowance as each depends from what is believed to be an allowable base claim.

Claim 18, as amended, is drawn to a method for transmitting data between a memory device in a magnetic-tape cartridge and an

external reading device, including providing a cartridge case having orthogonal walls in parallelepiped configuration and a slanted wall between two of said orthogonal walls, the slanted wall recessed with respect to one of said orthogonal walls, connecting the memory device to a chip antenna capable of communication through a magnetic field propagated from the slanted wall, providing a reading antenna connected to an external reading device in magnetic-field communication with the chip antenna, and transmitting data between said chip and reading antennas through said magnetic field propagated from the slanted wall.

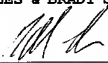
Again, for reasons previously described, Applicants believe claim 18, as amended, distinguishes of the prior art of record, taken singularly, or in combination. Claims 19-23 are believed to be allowable dependent claims.

Applicants believe that all information and requirements for the application have been provided to the USPTO. If there are matters that can be discussed by telephone to further the prosecution of the Application, Applicant(s) invite the Examiner to call the undersigned attorney at the Examiner's convenience.

The Commissioner is hereby authorized to charge any fees due with this Response to U.S. PTO Account No. 09-0449.

Respectfully submitted,  
**QUARLES & BRADY STREICH LANG LLP**

July 25, 2006



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